

DETAILED ACTION

Drawings

1. The drawings are objected to because figures 2 and 7 contain diagram boxes without a written description in the drawing of what they contain/pertain (reference numbers are not sufficiently descriptive). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation "...with pregroove land areas having a reduced depth or width...", and the claim also recites "pregroove land areas having a reduced depth and width..." which is the narrower statement of the range/limitation (note the recitation of "and/or" in line 10). Furthermore, claim 1 recites the broad recitation "...with pregroove land areas having a reduced depth and/or width...", and the claim also recites "...in particular zero depth" which is the narrower statement of the range/limitation.

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4. In addition, claim 2 recites the broad recitation "Record carrier as claimed in claim 1, wherein the pregroove modulation is synchronized to the wobble" and the claim also recites "...in particular wobble periods that are representing said control information comprising less pregroove land areas than wobble period not representing said control information." which is the narrower statement of the range/limitation.

5. Furthermore, claim 7 recites the broad recitation "...the long marks have lengths of at least 6T..." and the claim also recites "...in particular the lengths being in the range of 8T to 14T." which is the narrower statement of the range/limitation.

6. Also, claim 9 recites the broad recitation "pregroove pit areas having a predefined width and depth alternating with pregroove land areas having a reduced depth or width..." and the claim also recites "...pregroove pit areas having a predefined width and depth alternating with pregroove land areas having a reduced depth and width..." which is the narrower statement of the range/limitation (note the recitation of "and/or" in line 30).

7. Claim 9 also recites the broad recitation "pregroove pit areas having a predefined width and depth alternating with pregroove land areas having a reduced depth and/or width..." and the claim also recites "...in particular zero depth..." which is the narrower statement of the range/limitation.

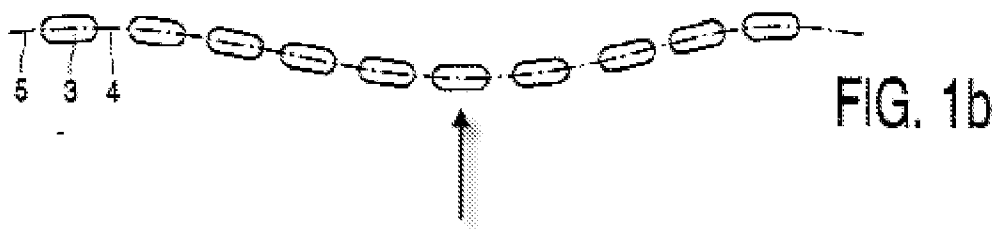
8. The dependent claims inherit these deficiencies.

Allowable Subject Matter

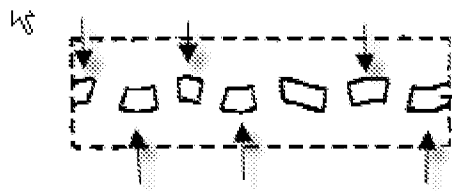
9. Claims 1 through 10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

10. The following is an examiner's statement of reasons for allowance: An optical record carrier of a writable type [See Oostveen et. al., US 2002/0031064, abstract] which is recorded via a beam of radiation with a scanning beam having an effective diameter on the track [Oostveen, fig. 3, B] is well known in the art. It is also well known for the record carrier to feature the recording layer comprising a pregroove [Oostveen, fig. 1b, 5] indicating the position of the track, the pregroove exhibiting a wobble [Oostveen, fig. 1b] constituted by periodical displacements of the pregroove in a direction transverse to the longitudinal direction of the track, the wobble exhibiting a wobble modulation for representing control information [Oostveen, (0013)], and the pregroove comprising a pregroove modulation [Oostveen, (0026)] constituted by pregroove pit areas having a predefined width and depth alternating with pregroove land areas having a reduced depth and/or width, in particular zero depth [Oostveen, fig. 1b].

11. However, prior art does not teach a record carrier where a majority of the pregroove land areas being located at zero crossings of the wobble and a majority of the pregroove pit areas being located at peak values of the wobble.



In the above figure from Oostveen, a pregroove pit area is located at a peak value of the wobble, indicated at the arrow. It is clearly the case though that it is only a minority of pregroove pit areas that match this criterion.



As indicated in the above figure from the case at hand, it is clearly indicated what is meant by having the majority of pregroove pit areas are located at the peak values of the wobble.

Claims 2 through 8 are allowable for the reason given above, as they contain the same pregroove pit location criterion as given in claim 1.

Claims 9 and 10 contain the same pregroove pit location requirement as claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Van Den Enden et. al. [US 6,295,270] teaches an optical disc that features a wobbled track and embossed pits at predetermined positions along the track, where the phase of the wobble determines depends on whether or not a pit is present. Spruit et. al. [US PGPub 2004/0160891] teaches an optical record carrier with a wobbled groove track with embossed pits located adjacent to the track, where the phase of the wobble is determined by whether or not there is an adjacent pit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW J. SASINOWSKI whose telephone number is (571)270-5883. The examiner can normally be reached on Monday to Friday, 7:30 to 5:00, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Robinson can be reached on (571)272-2319. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AJS

/Mark A. Robinson/
Supervisory Patent Examiner, Art Unit 4163